

Message

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**From:** Bolt, Matthew [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=2456E92CF5334FA5B89AF3DBB9A69119-BOLT, MATTH]  
**Sent:** 2/23/2017 8:55:22 PM  
**To:** Jade Dickens [Dickens.Jade@azdeq.gov]  
**CC:** Kyle W. Palmer [Palmer.Kyle@azdeq.gov]; Jason W. Sutter [Sutter.Jason@azdeq.gov]; Maurano, Stephen [Maurano.Stephen@epa.gov]; Sablad, Elizabeth [Sablade.Elizabeth@epa.gov]; Vollmer, Jared [Vollmer.Jared@epa.gov]  
**Subject:** RE: Queen Creek TMDL Review

Hi Jade,

To prime discussion for tomorrow's call, below is the working list of questions and comments we have so far:

1. Early on it is noted that the historical records shows Queen creek had flows that were "normally longer and more reliable before the impact of anthropogenic activities." Can ADEQ speak to what those records are and when the shift occurred across the watershed?
2. Could ADEQ please provide a copy of the UAA?
3. In Section 5.5, How was the natural background assumption modeled? When the mining-related copper loads were eliminated, what loads were put in place?
4. How did ADEQ choose critical condition for flow, when it varied across the reach and between different sizes of storms?
5. Section 6.3.1.2 - It's unclear whether ADEQ has done the calculations to determine whether specifying that concentration-based WQBELs set as WLAs based on site-specific receiving water hardness will ensure the load reductions necessary to restore Queen Creek. It would be more clear to specify the actual numeric value for each WLA, or at least provide an analysis of the range of hardness values expected to be considered in calculating a WQBEL and how using those meets the necessary reductions prescribed by the TMDL.
6. Page 38 separates "WQBEL" from "mass-based"; however, WQBELs can be expressed in concentration or mass. Based on the discussion on page 39, it appears this mass-based WLA is based on actual performance. If designed as an antidegradation limit (capping at current performance), it is a WQBEL. BPJ-based technology based effluent limits (TBELs) are derived according to the factors described in 40 CFR 125.3(d).
7. What types of situations would be considered "expanded individual AZPDES permits" as noted on page 40?
8. Section 6.3.1.2, second paragraph – recommend changing this to instead state that permittees demonstrate compliance with the WLA as described in their permit.

Thank You,  
Matt

Matthew Bolt  
Life Scientist  
Water Quality Assessment Section  
US EPA Region 9  
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San Francisco, CA 94105-3901  
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**From:** Jade Dickens [mailto:Dickens.Jade@azdeq.gov]  
**Sent:** Wednesday, February 22, 2017 5:49 AM  
**To:** Bolt, Matthew <Bolt.Matthew@epa.gov>  
**Cc:** Kyle W. Palmer <Palmer.Kyle@azdeq.gov>; Jason W. Sutter <Sutter.Jason@azdeq.gov>  
**Subject:** RE: Queen Creek TMDL Review

Hi Matt,

We did get the invite. We look forward to seeing EPAs comments on Thursday and speaking with you on Friday.

Thank you!  
Jade Dickens  
Supervisor, Watershed Protection Unit  
Arizona Department of Environmental Quality  
[jd11@azdeq.gov](mailto:jd11@azdeq.gov)  
(602)771-4115

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**From:** Bolt, Matthew [mailto:Bolt.Matthew@epa.gov]  
**Sent:** Tuesday, February 21, 2017 8:13 PM  
**To:** Jade Dickens <Dickens.Jade@azdeq.gov>  
**Cc:** Maurano, Stephen <Maurano.Stephen@epa.gov>; Kyle W. Palmer <Palmer.Kyle@azdeq.gov>; Jason W. Sutter <Sutter.Jason@azdeq.gov>; Hashimoto, Janet <Hashimoto.Janet@epa.gov>; Vollmer, Jared <Vollmer.Jared@epa.gov>; Andy Koester <Koester.Andy@azdeq.gov>; Sablad, Elizabeth <Sablade.Elizabeth@epa.gov>  
**Subject:** RE: Queen Creek TMDL Review

Hi Jade,  
I am compiling those comments/questions for you all and hope to have them to you via email by Thursday midday. The conference line is: 866-299-3188, Conference Code 972-3733. Please let me know if you do not get an MS Outlook invite.

Thank You,  
Matt

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**From:** Jade Dickens [mailto:Dickens.Jade@azdeq.gov]  
**Sent:** Friday, February 17, 2017 11:50 AM  
**To:** Bolt, Matthew <Bolt.Matthew@epa.gov>  
**Cc:** Maurano, Stephen <Maurano.Stephen@epa.gov>; Kyle W. Palmer <Palmer.Kyle@azdeq.gov>; Jason W. Sutter <Sutter.Jason@azdeq.gov>; Hashimoto, Janet <Hashimoto.Janet@epa.gov>; Vollmer, Jared <Vollmer.Jared@epa.gov>; Andy Koester <Koester.Andy@azdeq.gov>; Sablad, Elizabeth <Sablade.Elizabeth@epa.gov>  
**Subject:** RE: Queen Creek TMDL Review

Hi Matt,

Next Friday at 12:00 MST works for us. Would you please provide us your comments in advance so that we can be prepared for the discussion? Also, will you email us a phone number or conference line to call?

Thank you and look forward to next Friday.

Jade Dickens

Supervisor, Watershed Protection Unit

Arizona Department of Environmental Quality

[jd11@azdeq.gov](mailto:jd11@azdeq.gov)

(602)771-4115

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**From:** Bolt, Matthew [<mailto:Bolt.Matthew@epa.gov>]

**Sent:** Friday, February 17, 2017 11:37 AM

**To:** Jade Dickens <[Dickens.Jade@azdeq.gov](mailto:Dickens.Jade@azdeq.gov)>

**Cc:** Maurano, Stephen <[Maurano.Stephen@epa.gov](mailto:Maurano.Stephen@epa.gov)>; Kyle W. Palmer <[Palmer.Kyle@azdeq.gov](mailto:Palmer.Kyle@azdeq.gov)>; Jason W. Sutter <[Sutter.Jason@azdeq.gov](mailto:Sutter.Jason@azdeq.gov)>; Hashimoto, Janet <[Hashimoto.Janet@epa.gov](mailto:Hashimoto.Janet@epa.gov)>; Vollmer, Jared <[Vollmer.Jared@epa.gov](mailto:Vollmer.Jared@epa.gov)>; Christopher P. Henninger <[Henninger.Christopher@azdeq.gov](mailto:Henninger.Christopher@azdeq.gov)>; Andy Koester <[Koester.Andy@azdeq.gov](mailto:Koester.Andy@azdeq.gov)>; Sablad, Elizabeth <[Sablade.Elizabeth@epa.gov](mailto:Sablade.Elizabeth@epa.gov)>

**Subject:** RE: Queen Creek TMDL Review

Hi Jade,

Our availability next week:

-Thursday, the 23<sup>rd</sup>, from 3 PM MST / 2 PM PST onward

-Friday, the 24<sup>th</sup>, after noon MST / 11 AM PST onward

-Monday, the 27<sup>th</sup>, generally

Please let me know when is best for you all, we can conference in about 5 lines on an outbound call if that helps.

Thank You,

Matt

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**From:** Andy Koester [<mailto:Koester.Andy@azdeq.gov>]

**Sent:** Thursday, February 16, 2017 7:36 AM

**To:** Bolt, Matthew <[Bolt.Matthew@epa.gov](mailto:Bolt.Matthew@epa.gov)>; Sablad, Elizabeth <[Sablade.Elizabeth@epa.gov](mailto:Sablade.Elizabeth@epa.gov)>; Jade Dickens <[Dickens.Jade@azdeq.gov](mailto:Dickens.Jade@azdeq.gov)>

**Cc:** Maurano, Stephen <[Maurano.Stephen@epa.gov](mailto:Maurano.Stephen@epa.gov)>; Kyle W. Palmer <[Palmer.Kyle@azdeq.gov](mailto:Palmer.Kyle@azdeq.gov)>; Jason W. Sutter <[Sutter.Jason@azdeq.gov](mailto:Sutter.Jason@azdeq.gov)>; Hashimoto, Janet <[Hashimoto.Janet@epa.gov](mailto:Hashimoto.Janet@epa.gov)>; Vollmer, Jared <[Vollmer.Jared@epa.gov](mailto:Vollmer.Jared@epa.gov)>; Christopher P. Henninger <[Henninger.Christopher@azdeq.gov](mailto:Henninger.Christopher@azdeq.gov)>

**Subject:** RE: Queen Creek TMDL Review

Yes, that is the response.

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**From:** Bolt, Matthew [<mailto:Bolt.Matthew@epa.gov>]

**Sent:** Wednesday, February 15, 2017 5:25 PM

**To:** Andy Koester <[Koester.Andy@azdeq.gov](mailto:Koester.Andy@azdeq.gov)>; Sablad, Elizabeth <[Sablade.Elizabeth@epa.gov](mailto:Sablade.Elizabeth@epa.gov)>; Jade Dickens <[Dickens.Jade@azdeq.gov](mailto:Dickens.Jade@azdeq.gov)>

**Cc:** Maurano, Stephen <[Maurano.Stephen@epa.gov](mailto:Maurano.Stephen@epa.gov)>; Kyle W. Palmer <[Palmer.Kyle@azdeq.gov](mailto:Palmer.Kyle@azdeq.gov)>; Jason W. Sutter <[Sutter.Jason@azdeq.gov](mailto:Sutter.Jason@azdeq.gov)>; Hashimoto, Janet <[Hashimoto.Janet@epa.gov](mailto:Hashimoto.Janet@epa.gov)>; Vollmer, Jared <[Vollmer.Jared@epa.gov](mailto:Vollmer.Jared@epa.gov)>; Christopher P. Henninger <[Henninger.Christopher@azdeq.gov](mailto:Henninger.Christopher@azdeq.gov)>

**Subject:** RE: Queen Creek TMDL Review

Hi Andy,

Thank you for the information. Is the response specifically the following: "It is anticipated the draft TMDL will be available for public comment by February 1, 2017. Stakeholders will be notified when the draft TMDL public comment period has begun." ([http://static.azdeq.gov/pn/responses\\_resolution\\_cu.pdf](http://static.azdeq.gov/pn/responses_resolution_cu.pdf))?

Thank You,  
Matt

Matthew Bolt  
Life Scientist  
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**From:** Andy Koester [<mailto:Koester.Andy@azdeq.gov>]  
**Sent:** Wednesday, February 15, 2017 3:53 PM  
**To:** Sablad, Elizabeth <[Sablade.Elizabeth@epa.gov](mailto:Sablade.Elizabeth@epa.gov)>; Jade Dickens <[Dickens.Jade@azdeq.gov](mailto:Dickens.Jade@azdeq.gov)>; Bolt, Matthew <[Bolt.Matthew@epa.gov](mailto:Bolt.Matthew@epa.gov)>  
**Cc:** Maurano, Stephen <[Maurano.Stephen@epa.gov](mailto:Maurano.Stephen@epa.gov)>; Kyle W. Palmer <[Palmer.Kyle@azdeq.gov](mailto:Palmer.Kyle@azdeq.gov)>; Jason W. Sutter <[Sutter.Jason@azdeq.gov](mailto:Sutter.Jason@azdeq.gov)>; Hashimoto, Janet <[Hashimoto.Janet@epa.gov](mailto:Hashimoto.Janet@epa.gov)>; Vollmer, Jared <[Vollmer.Jared@epa.gov](mailto:Vollmer.Jared@epa.gov)>; Christopher P. Henninger <[Henninger.Christopher@azdeq.gov](mailto:Henninger.Christopher@azdeq.gov)>  
**Subject:** RE: Queen Creek TMDL Review

Hi Elizabeth,

Jade is referring to the commitment ADEQ made in the Response To Comments for the Resolution Copper Mine AZPDES permit. In the responsive summary, we stated the Queen Creek TMDL would be available for public comments in February. As you know, the Resolution permit was appealed and one of the comments was related to the Queen Creek impairment.

Let me know if this helps clarify.

Andy Koester  
Manager, AZPDES Individual Permits Unit  
Arizona Department of Environmental Quality  
Phone: 602-771-4689  
Email: [Koester.andy@azdeq.gov](mailto:Koester.andy@azdeq.gov)

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**From:** Sablad, Elizabeth [<mailto:Sablade.Elizabeth@epa.gov>]  
**Sent:** Wednesday, February 15, 2017 4:41 PM  
**To:** Jade Dickens <[Dickens.Jade@azdeq.gov](mailto:Dickens.Jade@azdeq.gov)>; Bolt, Matthew <[Bolt.Matthew@epa.gov](mailto:Bolt.Matthew@epa.gov)>  
**Cc:** Maurano, Stephen <[Maurano.Stephen@epa.gov](mailto:Maurano.Stephen@epa.gov)>; Kyle W. Palmer <[Palmer.Kyle@azdeq.gov](mailto:Palmer.Kyle@azdeq.gov)>; Jason W. Sutter <[Sutter.Jason@azdeq.gov](mailto:Sutter.Jason@azdeq.gov)>; Hashimoto, Janet <[Hashimoto.Janet@epa.gov](mailto:Hashimoto.Janet@epa.gov)>; Vollmer, Jared <[Vollmer.Jared@epa.gov](mailto:Vollmer.Jared@epa.gov)>; Andy Koester <[Koester.Andy@azdeq.gov](mailto:Koester.Andy@azdeq.gov)>; Christopher P. Henninger <[Henninger.Christopher@azdeq.gov](mailto:Henninger.Christopher@azdeq.gov)>  
**Subject:** RE: Queen Creek TMDL Review

Hi Jade,

Can you be more specific about which permit is creating a shorter timeline for the TMDL and why? Are you trying to issue the TMDL prior to the permit being reissued and that permits is on a LTF clock? Please help us understand. I also copied Andy and Chris in case they can provide more clarity.

Thanks,  
Elizabeth

Elizabeth Sablad  
Senior Permits Specialist  
NPDES Permits Section  
U.S. Environmental Protection Agency, Region 9  
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**From:** Jade Dickens [<mailto:Dickens.Jade@azdeq.gov>]  
**Sent:** Wednesday, February 15, 2017 11:42 AM  
**To:** Bolt, Matthew <[Bolt.Matthew@epa.gov](mailto:Bolt.Matthew@epa.gov)>  
**Cc:** Maurano, Stephen <[Maurano.Stephen@epa.gov](mailto:Maurano.Stephen@epa.gov)>; Sablad, Elizabeth <[Sablاد.Elizabeth@epa.gov](mailto:Sablاد.Elizabeth@epa.gov)>; Kyle W. Palmer <[Palmer.Kyle@azdeq.gov](mailto:Palmer.Kyle@azdeq.gov)>; Jason W. Sutter <[Sutter.Jason@azdeq.gov](mailto:Sutter.Jason@azdeq.gov)>; Hashimoto, Janet <[Hashimoto.Janet@epa.gov](mailto:Hashimoto.Janet@epa.gov)>; Vollmer, Jared <[Vollmer.Jared@epa.gov](mailto:Vollmer.Jared@epa.gov)>  
**Subject:** RE: Queen Creek TMDL Review

Hi Matt,

We are in training all week so will not be available for a call until next week. Please let us know dates and times that work for you all next week. I wanted to emphasize again for EPA that this TMDL is being held to a timeline as part of an AZPDES permit process in the area. Please focus on any large “showstopper” issues that you are finding.

Thanks!  
Jade Dickens  
Supervisor, Watershed Protection Unit  
Arizona Department of Environmental Quality  
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**From:** Bolt, Matthew [<mailto:Bolt.Matthew@epa.gov>]  
**Sent:** Monday, February 13, 2017 12:03 PM  
**To:** Jade Dickens <[Dickens.Jade@azdeq.gov](mailto:Dickens.Jade@azdeq.gov)>  
**Cc:** Maurano, Stephen <[Maurano.Stephen@epa.gov](mailto:Maurano.Stephen@epa.gov)>; Sablad, Elizabeth <[Sablاد.Elizabeth@epa.gov](mailto:Sablاد.Elizabeth@epa.gov)>; Kyle W. Palmer <[Palmer.Kyle@azdeq.gov](mailto:Palmer.Kyle@azdeq.gov)>; Jason W. Sutter <[Sutter.Jason@azdeq.gov](mailto:Sutter.Jason@azdeq.gov)>; Hashimoto, Janet <[Hashimoto.Janet@epa.gov](mailto:Hashimoto.Janet@epa.gov)>; Vollmer, Jared <[Vollmer.Jared@epa.gov](mailto:Vollmer.Jared@epa.gov)>  
**Subject:** RE: Queen Creek TMDL Review

Hi Jade,  
We are flexibly available this Friday February 17, 2017 for a preliminary discussion. When is best for you all?

Thank You,  
Matt

Matthew Bolt

Life Scientist  
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**From:** Hashimoto, Janet

**Sent:** Monday, February 13, 2017 10:44 AM

**To:** [Dickens.Jade@azdeq.gov](mailto:Dickens.Jade@azdeq.gov)

**Cc:** Maurano, Stephen <[Maurano.Stephen@epa.gov](mailto:Maurano.Stephen@epa.gov)>; Bolt, Matthew <[Bolt.Matthew@epa.gov](mailto:Bolt.Matthew@epa.gov)>; Sablad, Elizabeth <[Sablاد.Elizabeth@epa.gov](mailto:Sablاد.Elizabeth@epa.gov)>; [palmer.kyle@azdeq.gov](mailto:palmer.kyle@azdeq.gov); [sutter.jason@azdeq.gov](mailto:sutter.jason@azdeq.gov)

**Subject:** Queen Creek TMDL Review

Hi Jade: Thank you for forwarding the draft Queen Creek copper TMDL for EPA's early review. We are starting our review and will do our best to review quickly. However, given that we only received the TMDL late last week and this is the first time we are seeing the document, it seems unlikely to have our review completed by the end of this week, 2/17. We will provide comments as soon as we can, and will try to get you some comments by this week. Also, if necessary, EPA will provide comments during the public comment period. In general, we think it would be best if EPA provided comments on drafts on TMDLs and any other document requiring EPA review and approval. This allows us to resolve issues with AZ DEQ, in the spirit of the accord being developed between our agencies, prior to public review of a document so that it would be approvable in its entirety.

After we have some comments, we may want to set up a time for you to chat with us. Stephen Maurano and/or Matt Bolt will contact you this week to set up the call. Thanks. Janet



United States Environmental Protection Agency

Janet Y. Hashimoto

Manager, Water Quality Assessment Section

US EPA Region 9

Water Division; Ecosystems Branch

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**From:** Jade Dickens [<mailto:Dickens.Jade@azdeq.gov>]

**Sent:** Friday, February 10, 2017 12:10 PM

**To:** Maurano, Stephen <[Maurano.Stephen@epa.gov](mailto:Maurano.Stephen@epa.gov)>; Bolt, Matthew <[Bolt.Matthew@epa.gov](mailto:Bolt.Matthew@epa.gov)>; Sablad, Elizabeth <[Sablاد.Elizabeth@epa.gov](mailto:Sablاد.Elizabeth@epa.gov)>

**Cc:** Kyle W. Palmer <[Palmer.Kyle@azdeq.gov](mailto:Palmer.Kyle@azdeq.gov)>; Jason W. Sutter <[Sutter.Jason@azdeq.gov](mailto:Sutter.Jason@azdeq.gov)>

**Subject:** Queen Crk Diss Copper TMDL final report draft

Hello EPA,

Attached is the draft TMDL for Queen Creek. We have discussed in the past that EPA get a chance to review TMDLs before going out for public comment. This round of EPA review is to look at any major show stopper issues that EPA had regarding the TMDL. There are interested stakeholders waiting for the chance to complete the public comment, and we are on a very tight timeframe. Please get us any comments on major issues by COB Friday February 17. If we do not hear from you, we will assume that EPA is

comfortable with the TMDL and proceed with the process. Please remember that we still encourage you to comment during the public comment period for minor issues.

Thank you,  
Jade Dickens  
Watershed Protection Unit Manager  
Arizona Department of Environmental Quality  
[Jd11@azdeq.gov](mailto:Jd11@azdeq.gov)

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